

Fig. 1

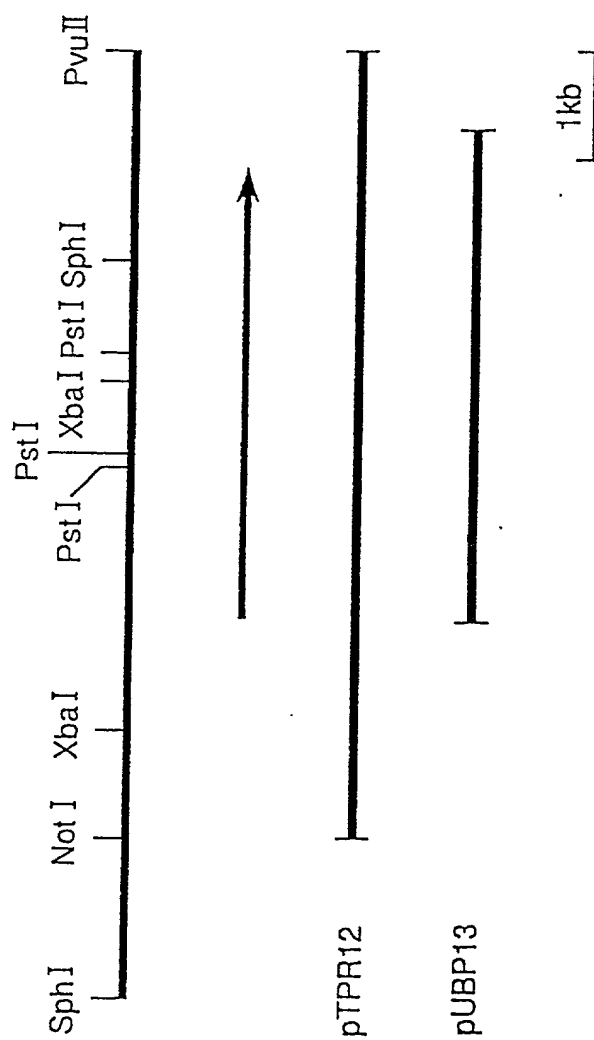


Fig. 2

170 175 180
Asp Gly Ser Gly Val Val Val Ala Val Leu Asp Thr Gly Val
5'-GAT GGT AGT GGT GTT GTT GTT GCA GTA CTT GAC ACG GGA GTT-3'

PRO-1F 5'-GGW WSD RRT GTT RRH GTH GCD GTD MTY GAC ACB GG-3'

Fig. 3

365 370 375
His Gly His Gly Thr His Val Ala Gly Thr Val Ala Gly Tyr
5'-CAC GGT CAC GGA ACT CAC GTA GCT GGA ACT GTT GCT GGT TAC-3'

PRO-2F 5'-KST CAC GGA ACT CAC GTD GCB GGH ACD GTT GC-3'
PRO-2R 3'-GTG CCT TGA GTG CAH CGV CCK TGH CAA CGM CSA-5'

Fig. 4

590 595
Ser Gly Thr Ser Met Ala Thr Pro His Val Ser Gly Val Val
5'-TCT GGA ACT TCG ATG GCT ACT CCA CAT GTC AGC GGT GTC GTT-3'

PRO-4R 3'-CCD TGV AGB TAC CGD WGA GGB GTR CAV YSG CCH C-5'

Fig. 5

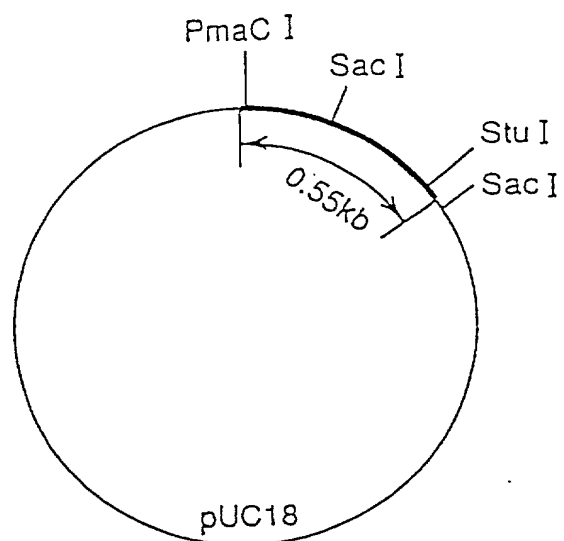


Fig. 6

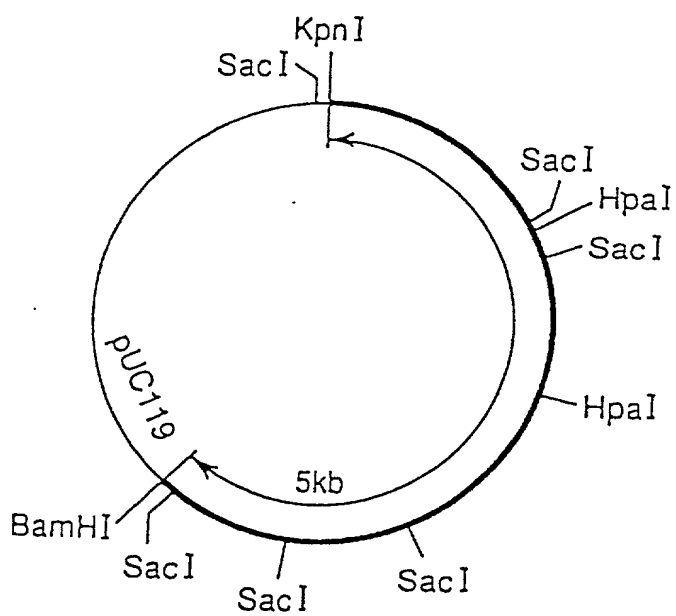


Fig. 7

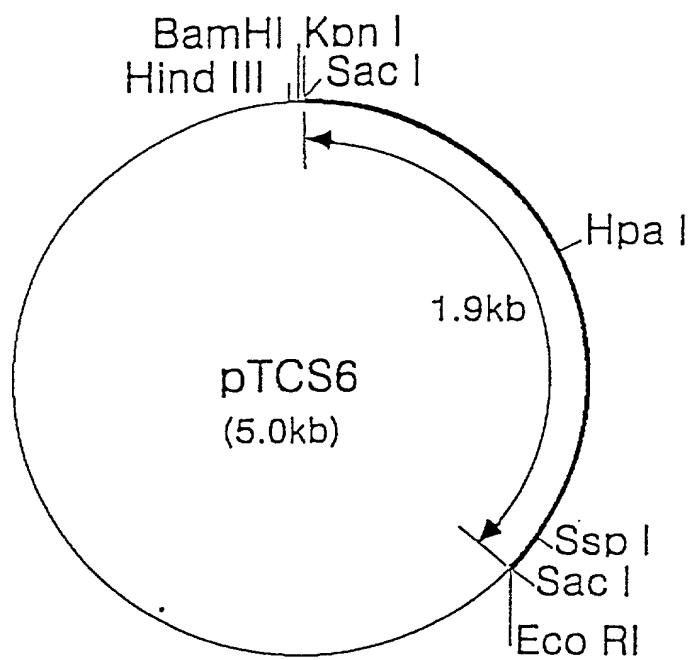
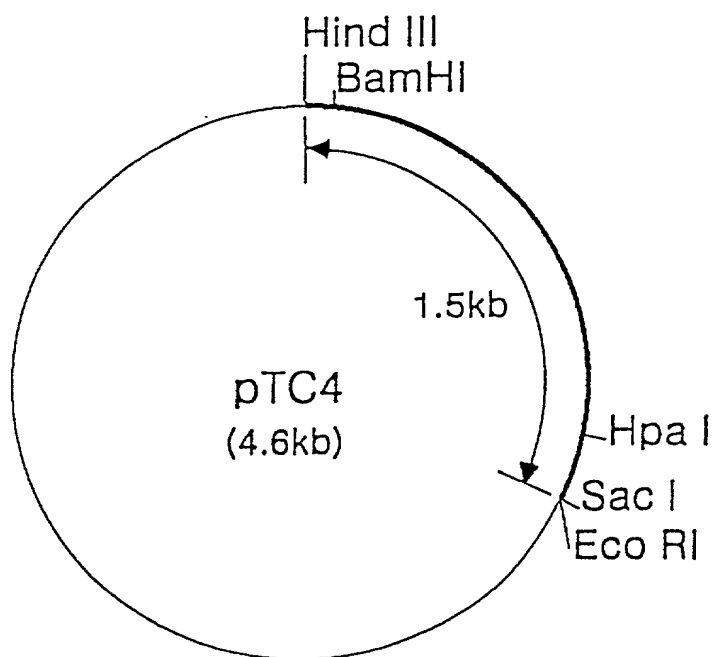


Fig. 8



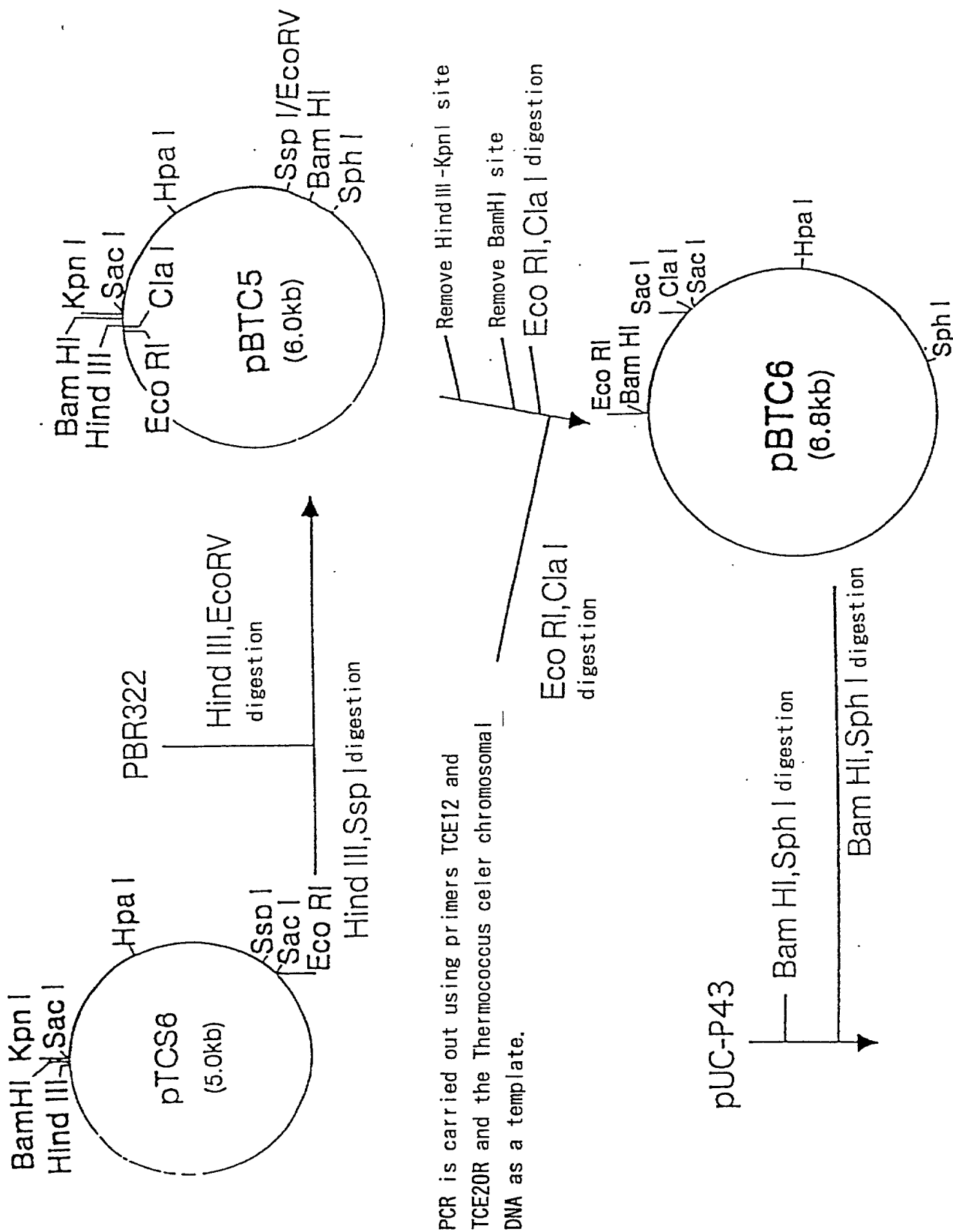


Fig. 9 (Cont'd)

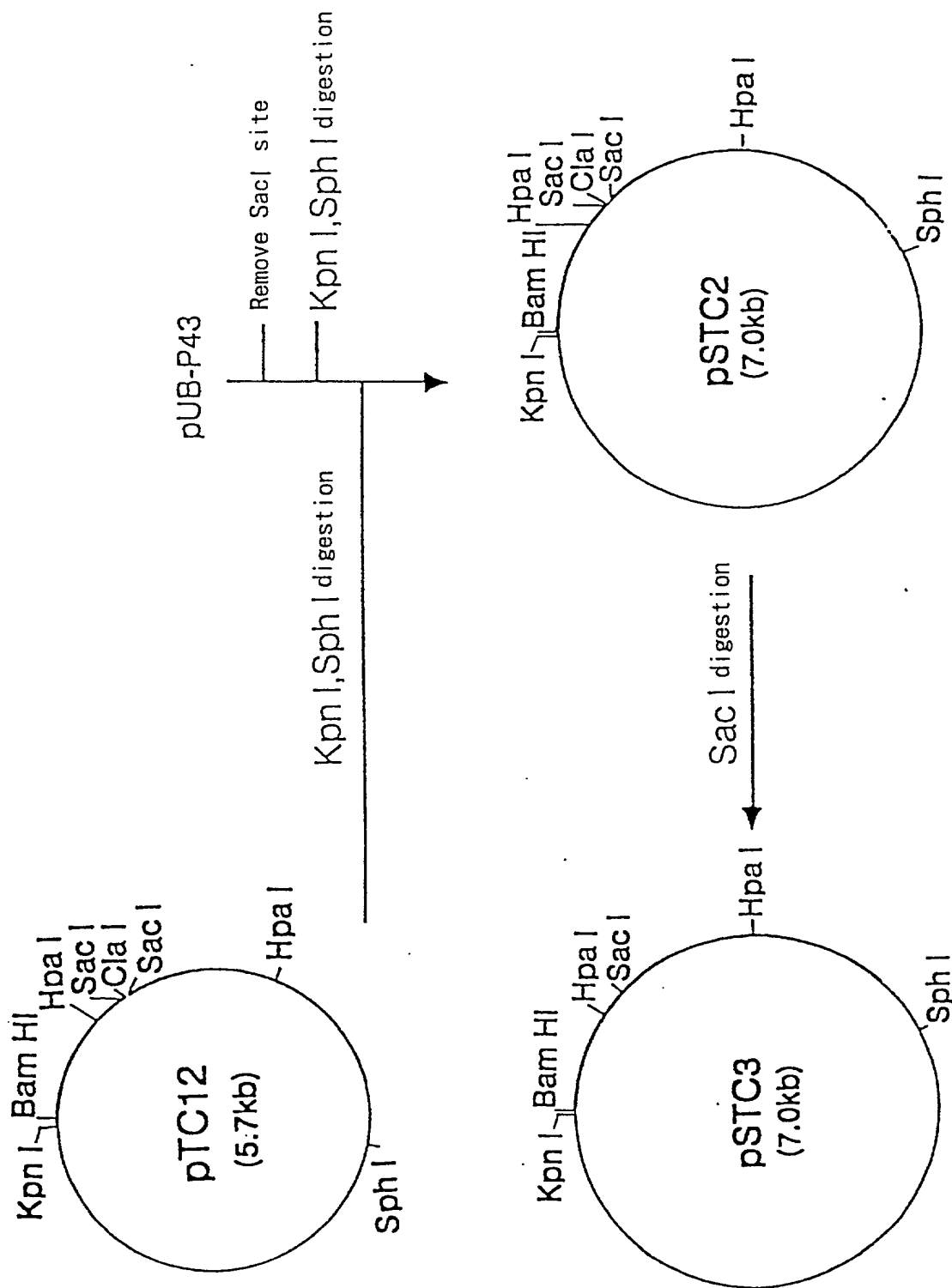


Fig. 10

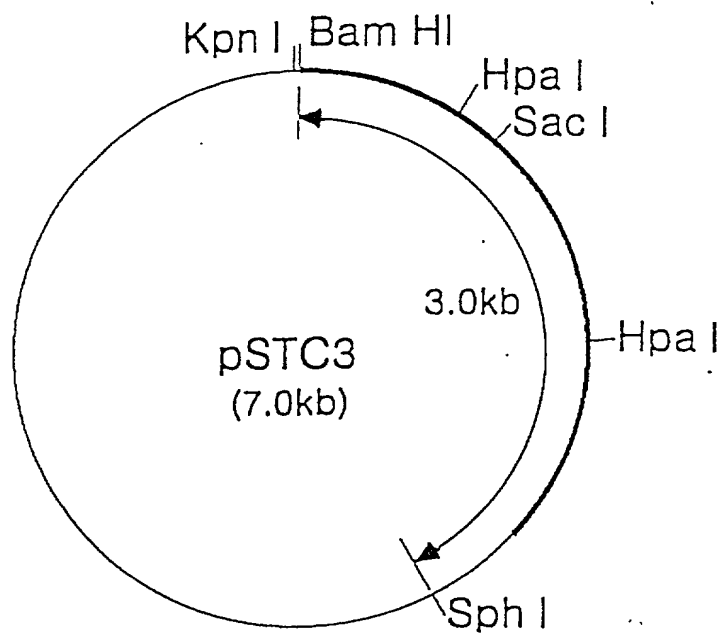


Fig. 11

	10	20	30	40	50
PFUL	MNKKGLTVLF	IAIMLLSVVP	VHFVSAETPP	VSENSTTSI	LPNQVVVTK
TCS		MKRLGAVV	LALVLVGLLA	GTALAPVKP	VVRNNAVQQK
SUBTILISIN					MRGKKVWISL

	60	70	80	90	100
PFUL	VSQAALNAIM	KGQPNMVLII	KTKEGKLEEA	KTELEKLGAE	ILDENRVLNM
TCS	NYGLLTPGLF	KKVQRMWNQ	EVDTVIMFGS	YGDRDRAVKV	LRLMGAQVKY
SUBTILISIN	LFALALIFTM	AFGSTSSAQ	AGKSNGEKKY	IVGFKQTMST	MSAAKKKDVI

	110	120	130	140	150
PFUL	LLVKIKPEKV	KELNYISSLE	KAWLNREVKL	SPPIVEKDVK	TKEPSLEPKM
TCS	SYKIIPAVAV	KIKARDLLLI	AGMIDTGYFG	NTRVSGIKFI	QEDYKVQVDD
SUBTILISIN	SEKGGKVQKQ	FKYVDAASAT	LNEKAVKELK	KDPSVAYVEE	DHVAHAYAQS

160 YNSTWVINAL QFIQEFFGYDG 170 SGVVAVALDT 180 GVDPNHPFELS 190 ITPDGRRKII 200
 PFUL
 160 ATSVSQIGAD TVWNSLGYDG 170 SGVVAVALVD 180 GIDANHPDLK 190 GKVIGWYDAV 200
 TCES
 160 VPYGVSQIKA PALHSQGYTC 170 SNMKVAVIDS 180 GIDSSHPDLK 190 VAGGASMPVS 200
 SUBTILISIN

PPFUL	210	220	230	240	250
	EWKDFTDEGF	VDTSFSFSKV	VNGTLIINTT	FQVASGLTLN	ESTGLMEYVV
TCS	NGRSTPYDDQ	-----	-----	-----	-----
SUBTILISIN	ETNPFQDNN-	-----	-----	-----	-----

	260	270	280	290	300
PPFUL	KTVVYSNVTI	GNITSANGIY	HFGLLPERYF	DLNFDGDQED	FYPVLLVNST
TCE	-----	-----	-----	-----	-----
SUBTILISIN	-----	-----	-----	-----	-----

FIG. 11 (Cont'd)

PFUL	310	320	330	340	350
TCES	GNGYDIAYVD	TDLDYDFDE	VPLGQYNVTY	DVAVFSYYG	PLNYVLAIED
SUBTILISIN	-----	-----	-----	-----	-----
PFUL	360	370	380	390	400
TCES	PNGEYAVFGW	DGHGHGTHVA	GTVAGYD[SNN	DAWDWLSMYS	GEWEVFSRLY
SUBTILISIN	-----	-----	-----	-----	-----
PFUL	410	420	430	440	450
TCES	GWDYTNVTTD	TVQGVAPGAQ	IMAIRVLRSD	GRGSMWD[IE	CMTYAATHGA
SUBTILISIN	-----	-----	-----	-----	-----
PFUL	460	470	480	490	500
TCES	-----	-----	-----	-----	-----
SUBTILISIN	-----	-----	-----	-----	-----
PFUL	510	520	530	540	550
TCES	N--IVGSPGV	ATKAITVGA	AVPINVGYYV	SQALGYPDYY	GFYYFPAYTN
SUBTILISIN	-----	-----	-----	-----	-----
PFUL	560	570	580	590	600
TCES	VRIAFFSSRG	PRIDGETKFN	VVAPGYG[YS	SLEMMWIGGAD	F-----MS
SUBTILISIN	-----	-----	-----	-----	-----

PFUL	610	620	630	640	650
TCES	GTSMATPHVS	GVVALLISGA	KAEGIYYPND	IICKVLESQA	TWLEGDPTG
SUBTILISIN	GTSMATPHVS	GVAALILQAH	PSWTPDKVKT	----ALIENTA	DIVAPKEIAD
	GTSMASPHVA	GAAALILSKH	PNWNTQVRS	----SLENTT	TKL-GDS---
PFUL	660	670	680	690	700
TCES	QKYTELDDQH	GLVNVTKSWE	ILKAINGTTL	PIVDHWADKS	YSDFAEYLG
SUBTILISIN	-----IAYGA	GRVNVYKAIK	YDDYAKLTFT	GSVADKGSAT	HTFDVSGATF
	-----FYGK	GLINVQAQAQ *			
PFUL	710	720	730	740	750
TCES	DVIRGLYARN	SIPDIVEMHI	KYVGDTFYRT	FEIYATEPWI	KPFVSGSVIL
	VTATLYWDTG	SSDIDLILYD	PNGNEVDYSY	TAYYGFKEVG	YYNPATAGTWT
PFUL	760	770	780	790	800
TCES	ENNTFVLRV	KYDVEGLEPG	LYVGRIIIDD	PTTPVIEDEI	LNTIUIPEKF
	VKVVSYKGAA	NYQVDVVSDG	SLSQSGGGNP	NPNPNPPTP	TTDTQTFTGS
PFUL	810	820	830	840	850
TCES	TPENNYTLTW	YDINGPEMVT	HFFFVPEGV	DVLYAMTTYW	DYGLYRPDGM
	VNDYWDTSMT	FTMNVNSGAT	KITGDLTFTD	SYNDLDLILY	DPNGNLVDRS
PFUL	860	870	880	890	900
TCES	FVFPYQLDYL	PAAVSNPMPG	NWELVWTGFN	FAPLYESGFL	VRIYGVETIP
	TSSNSYEHVE	YANPAPGTWT	FLVYAYRTYG	WADYQLKAVV	YYG*
PFUL	910	920	930	940	950
	SVWYINRTYL	DTNTEFSIEF	NITNIYAPIN	ATLIPIGLGT	YNASVESVGD

Fig. 12 (Cont'd)

PFUL	960	970	980	990	1000
	GEFFIKGIEV	PEGTAELKIR	IGNPSVPNSD	LDLYLYDSKG	NLVALDGNPT
PFUL	1010	1020	1030	1040	1050
	AEEFVVVEYP	KPGVYSIVVH	GYSVRDENG	PTTTTFDLVV	QMTLDNGNIK
PFUL	1060	1070	1080	1090	1100
	LDKDSIILGS	NESVVVTANI	TIDRDHPTGV	YSGIIEIRD	EVYQDNTSI
PFUL	1110	1120	1130	1140	1150
	AKIPITLVID	KADFAVGLTP	AEGVLGEARN	YTLIVKHALT	LEPVPNATVI
PFUL	1160	1170	1180	1190	1200
	IGNYTYLTDE	NGTVTFTYAP	TKLGSDEITV	IVKKENFNTL	EKTFQITVSE
PFUL	1210	1220	1230	1240	1250
	PEITEEDINE	PKLAMSSPEA	NATIVSVEME	SEGGVKKTVT	VEITINGTAN
PFUL	1260	1270	1280	1290	1300
	ETATIVVPVP	KKAENIEVSG	DHVISYSIEE	GEYAKYVIIT	VKFASPVTVT
PFUL	1310	1320	1330	1340	1350
	VTYTIYAGPR	VSILTILNFLG	YSWYRLYSQK	FDELYQKALE	LGVDNETLAL
PFUL	1360	1370	1380	1390	1400
	ALSYHEKAKE	YYEKALELSE	GNIIQYLGDI	RLPPLRQAY	INEMKAVKIL
PFUL	1410				
	EKAIEELEGE	E*			

Fig. 13

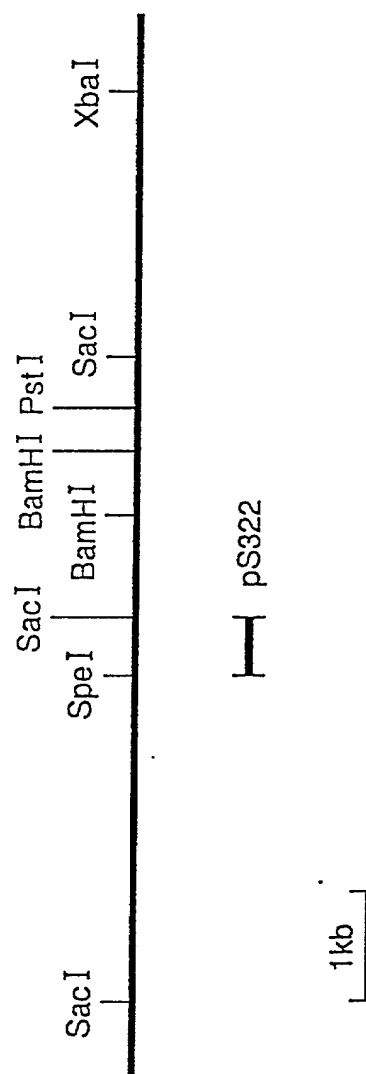


Fig. 14 .

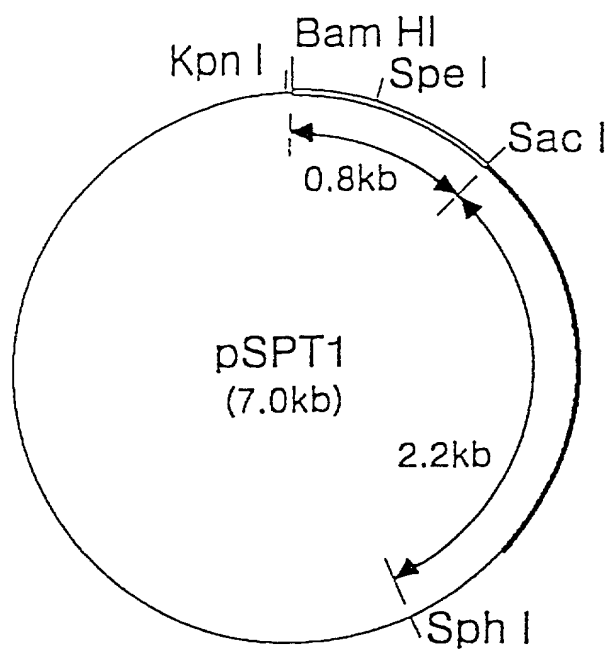


Fig. 15

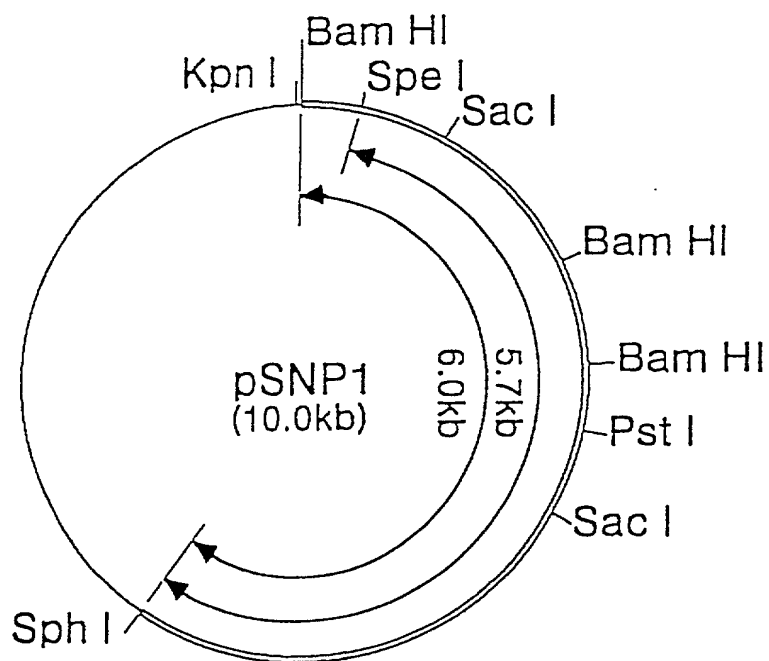


Fig. 16

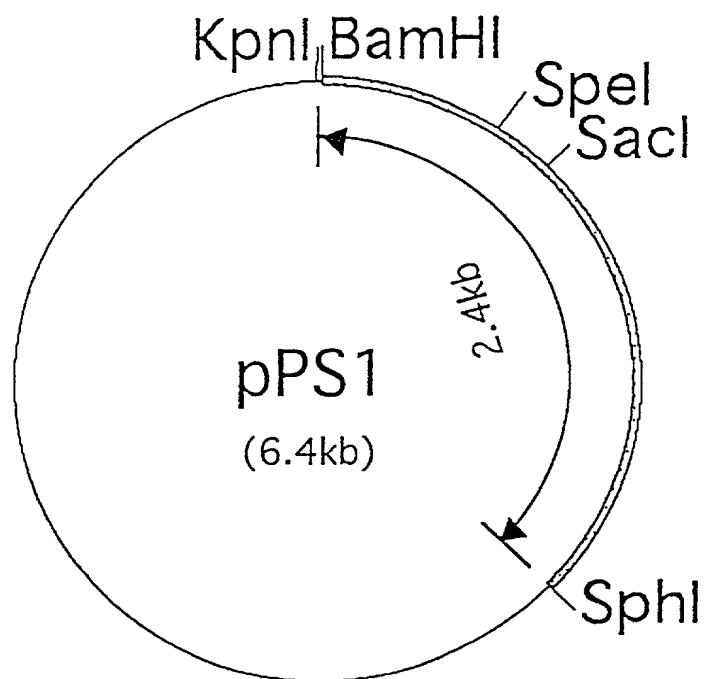


Fig. 17

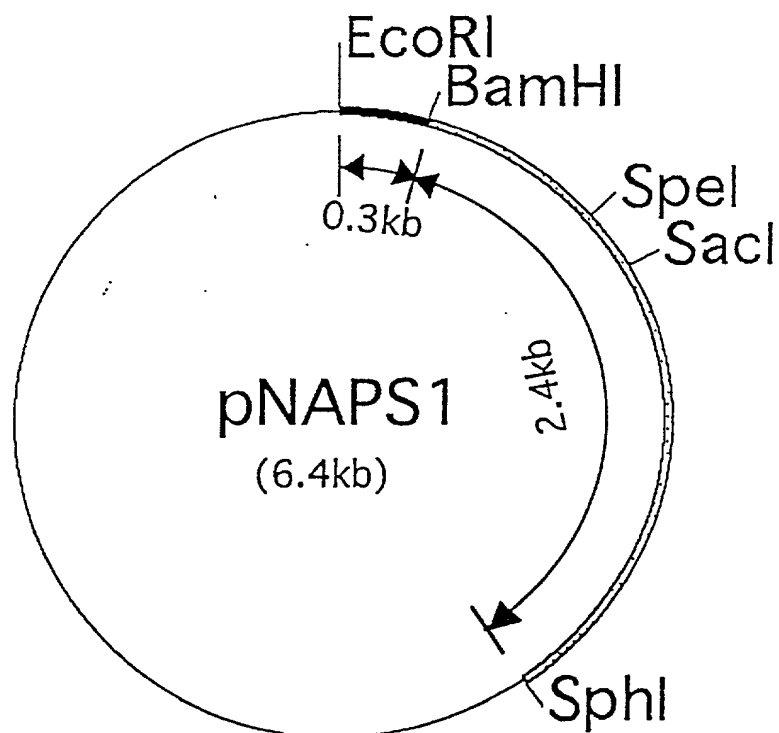


Fig. 18

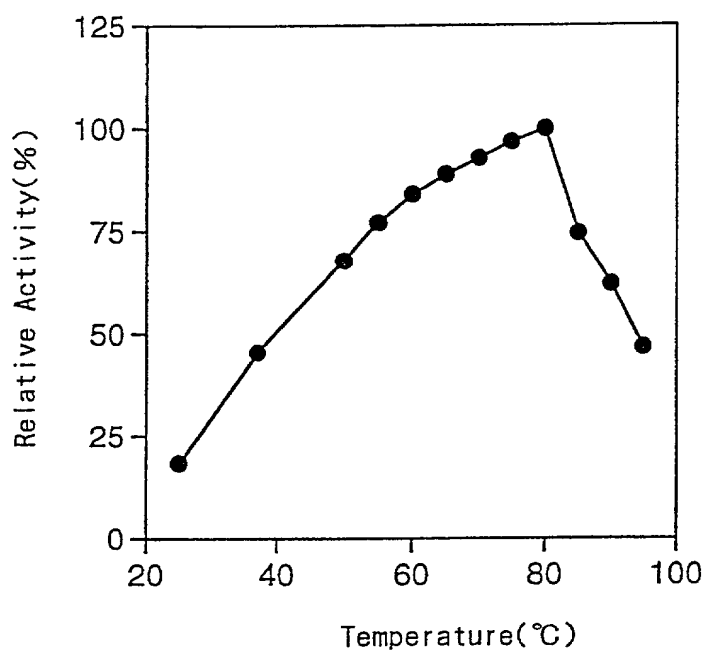


Fig. 19

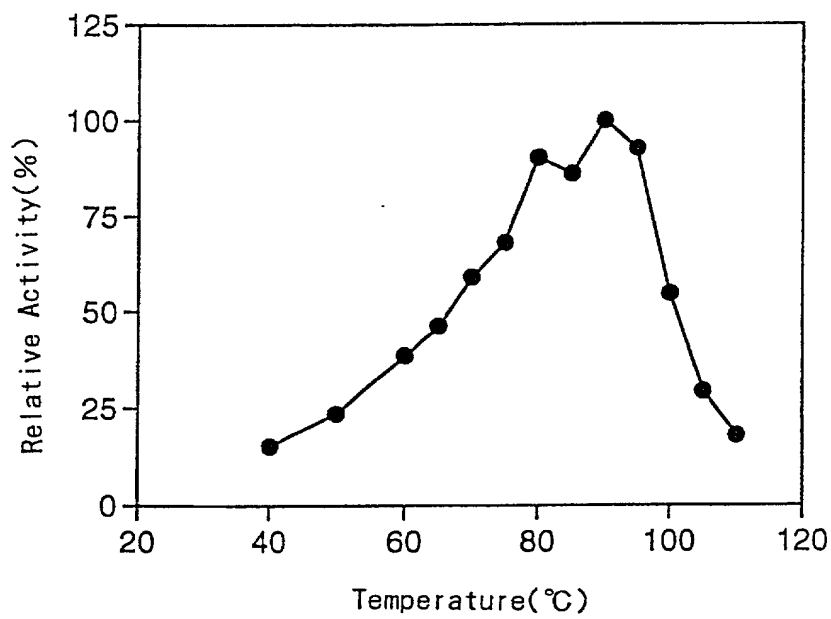


Fig. 20

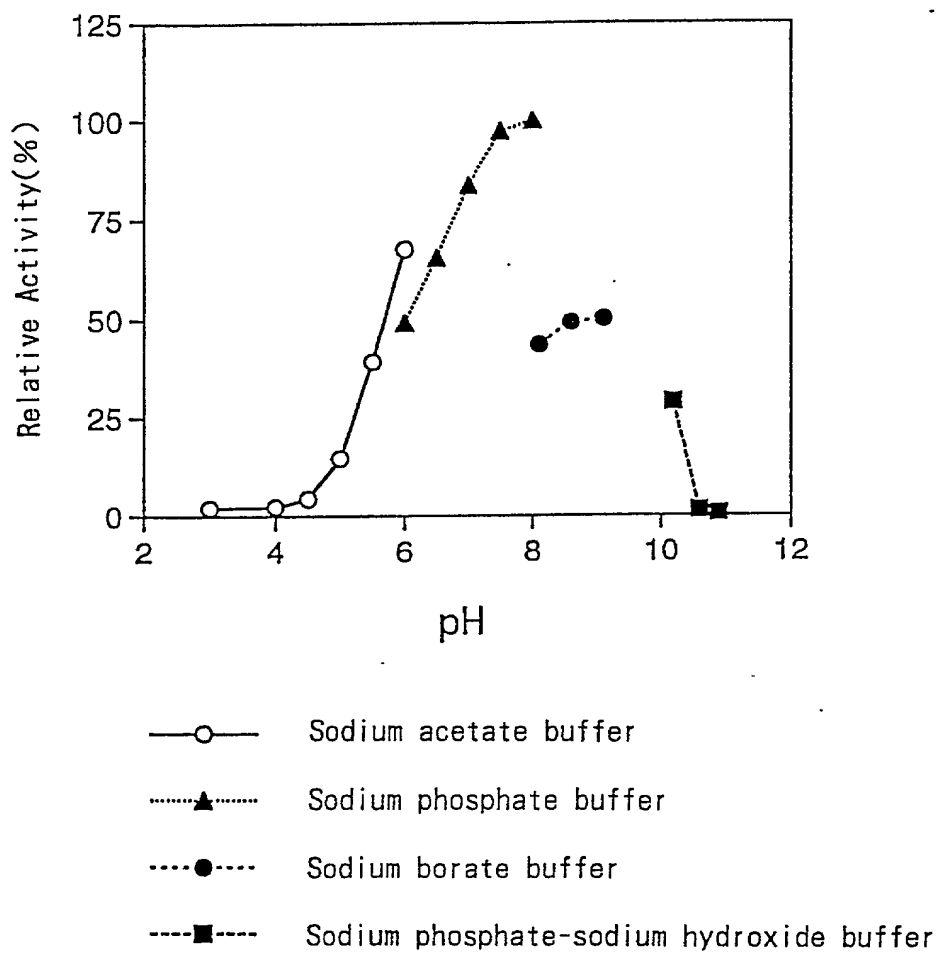


Fig. 21

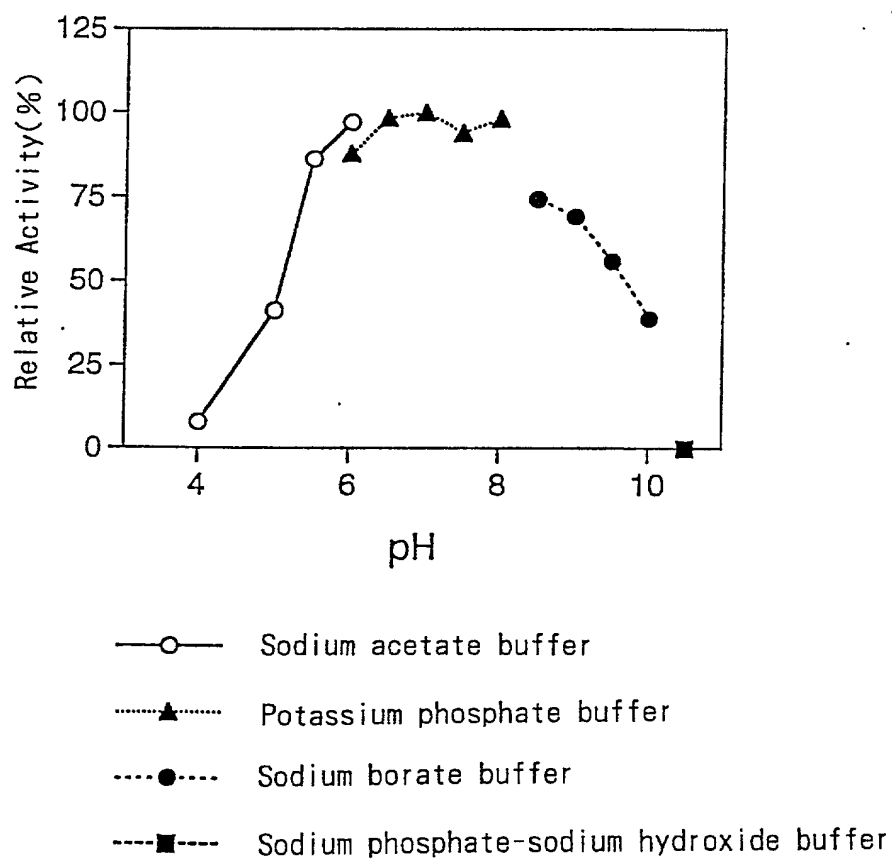


Fig. 22

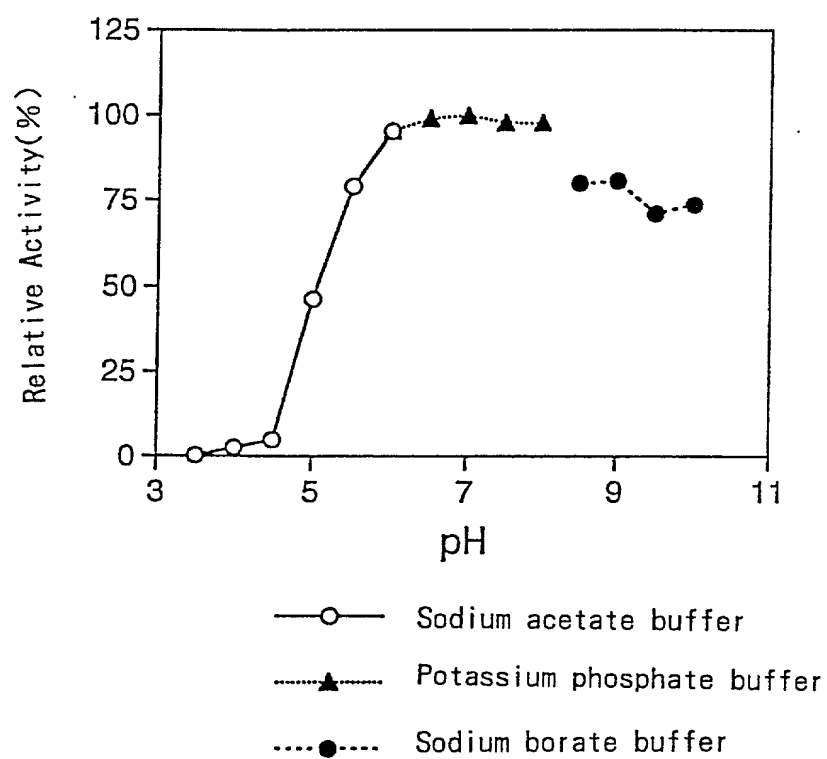


Fig. 23

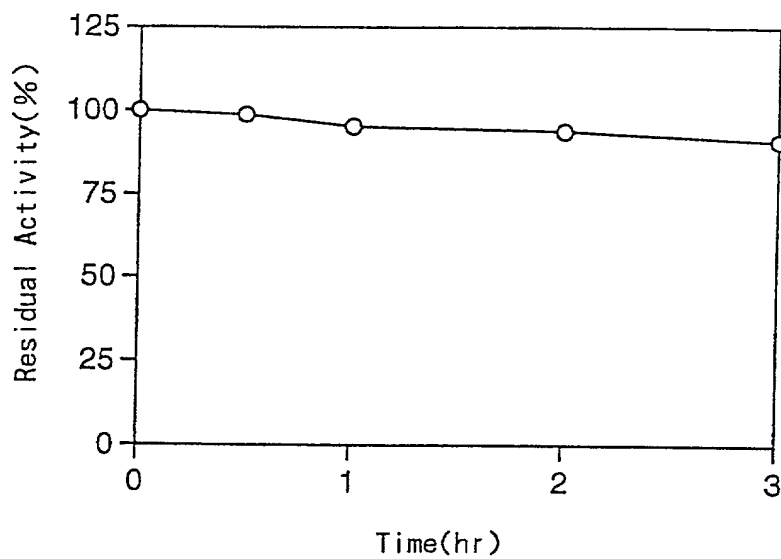


Fig. 24

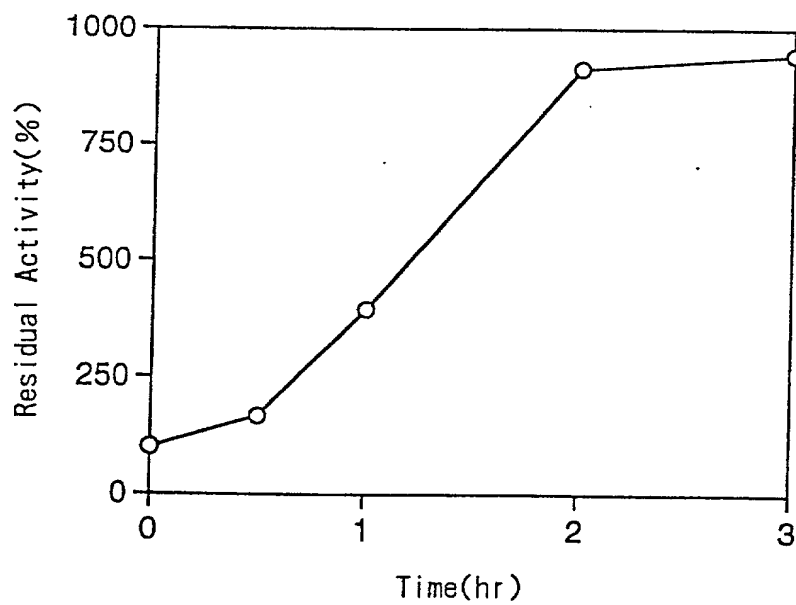


Fig. 25

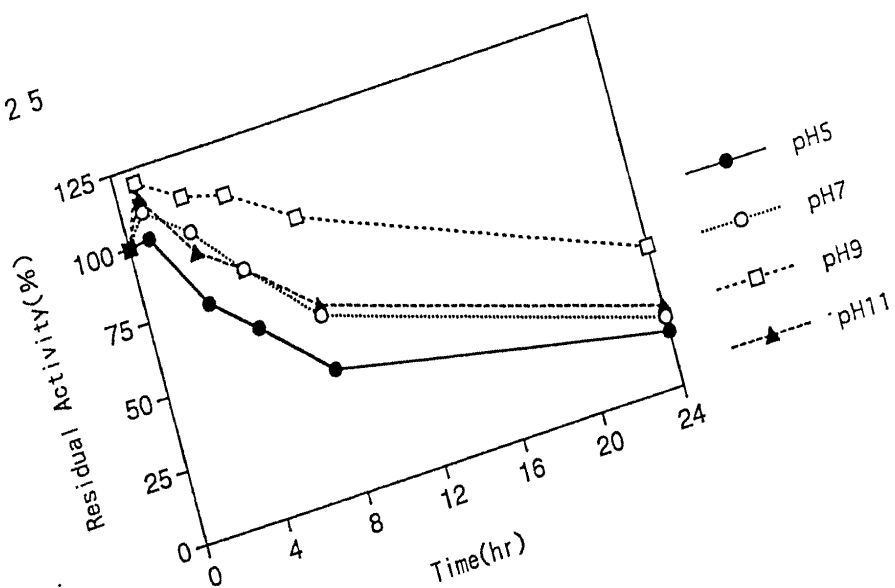


Fig. 26

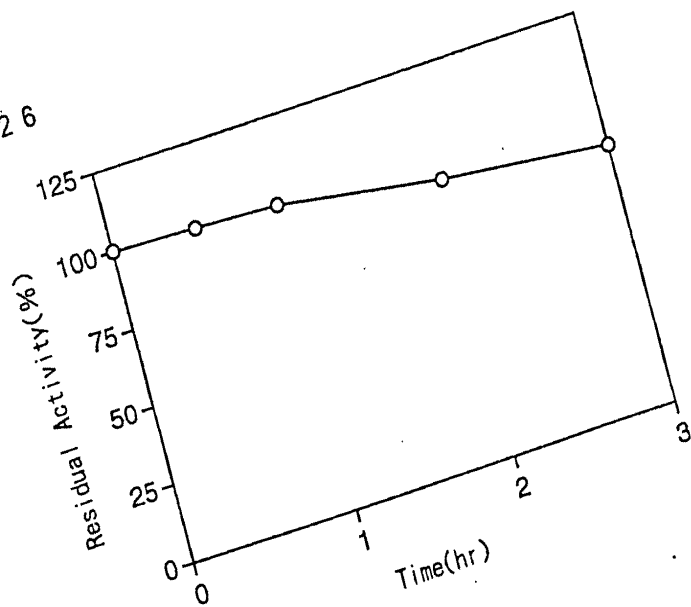


Fig. 27

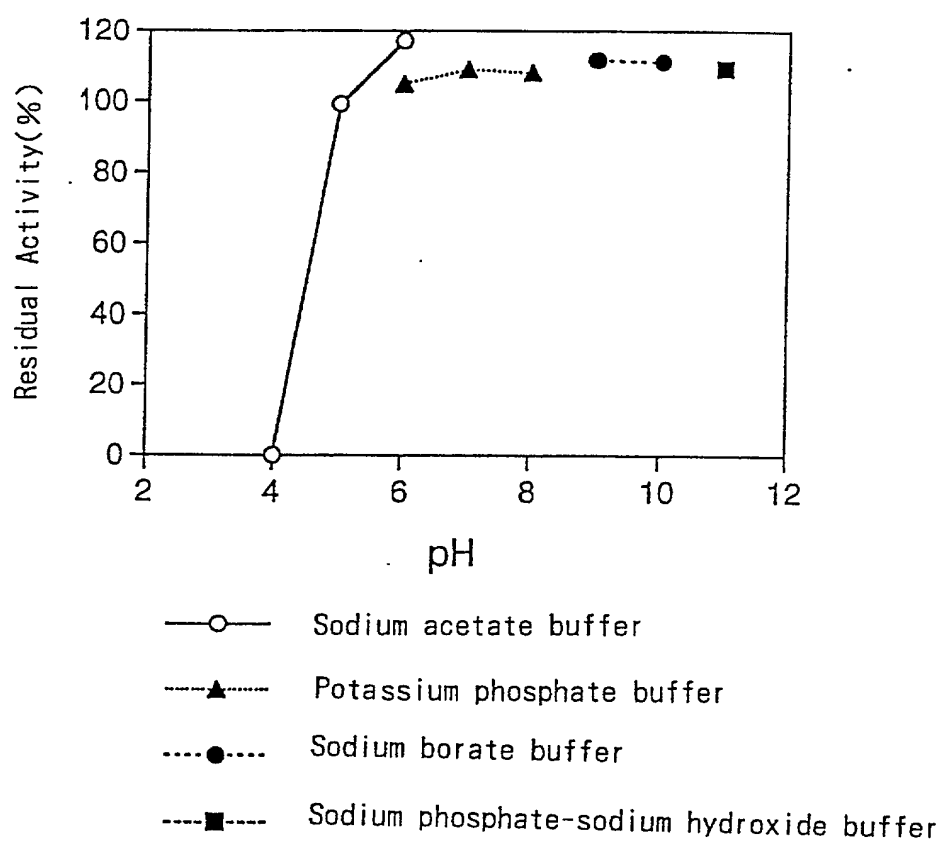


Fig. 28

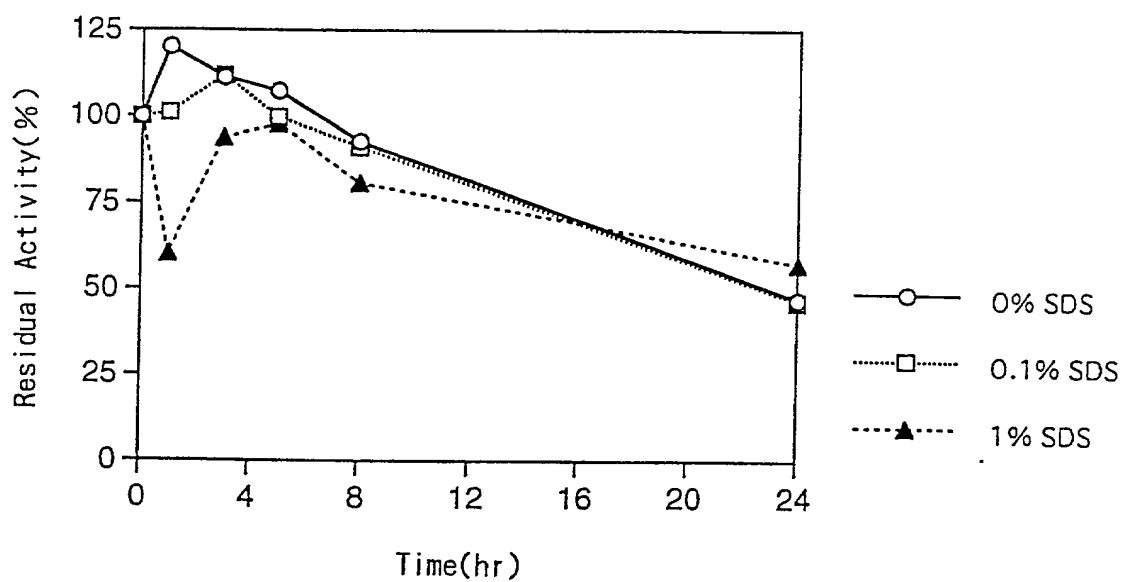


Fig. 29

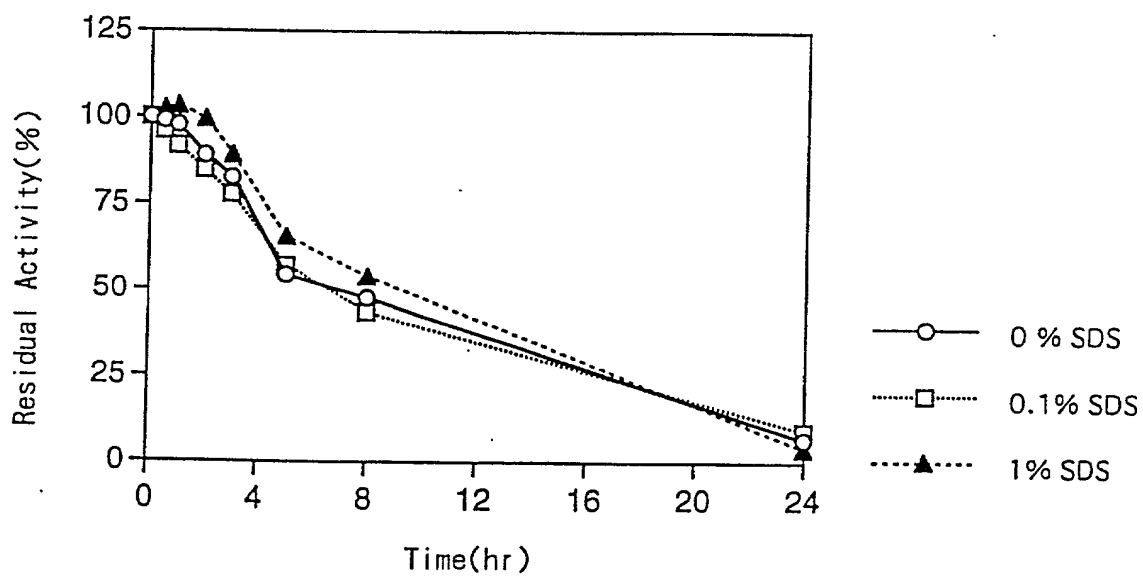


Fig. 30

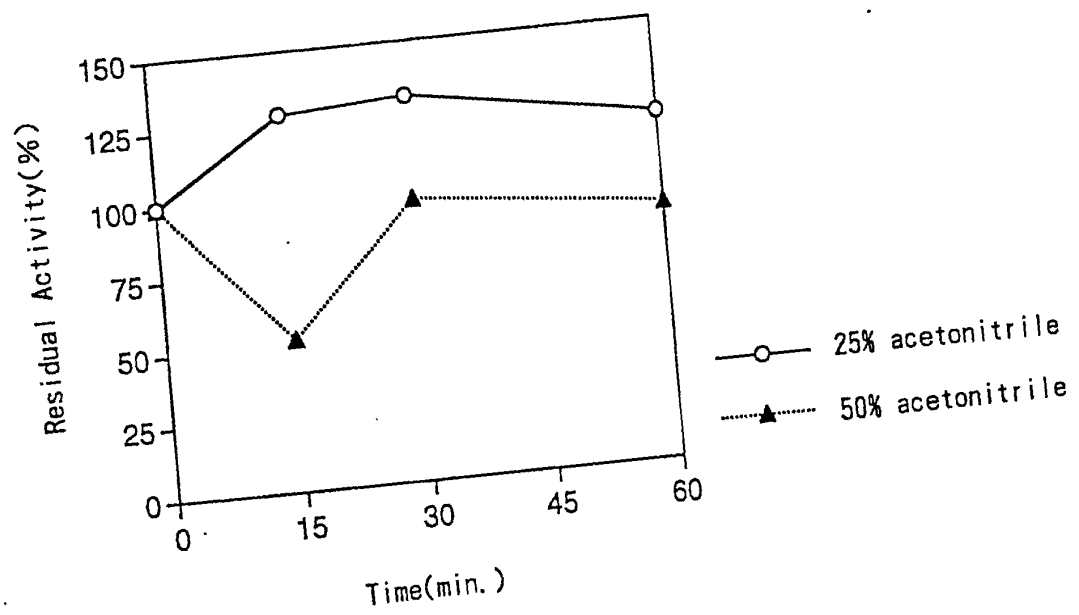


Fig. 31

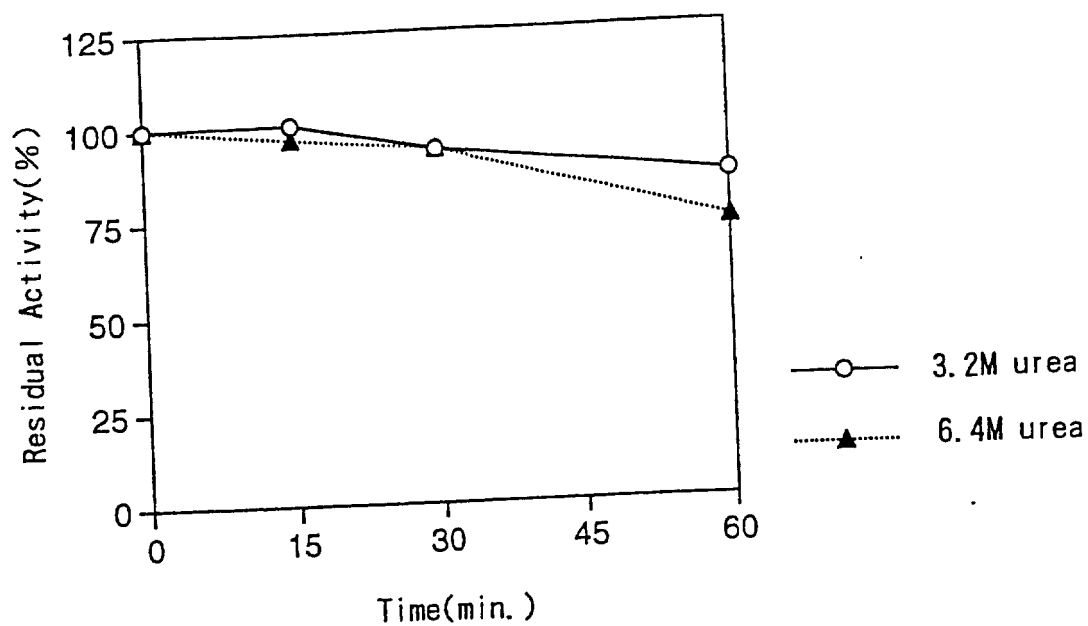


Fig. 32

